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| 10/523,890 | 02/04/2005 | Claudio Allegretti | 163-608 | 1367 |

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NEW YORK, NY 10036

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| EXAMINER |
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ELCENKO, ERIC J

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| ART UNIT | PAPER NUMBER |
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2617

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06/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/523,890 | Applicant(s) ALLEGRETTI, CLAUDIO | |
| | Examiner Eric Elcenko | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al. (U.S. Pat. No. 6,954,454) in view of Wiedman et al. (U.S. Pat. No. 6,233,463)

Regarding claim 1, Schuster discloses a telecommunications and telephony network (AT) for controlling mobile (TC) or fixed peripheral devices at a customer premises, of the type comprising

at least of local area network (i.e. IP voice network) (col. 7 lines 30-40);
at least one local residents' network (i.e. cable network) (col. 7 lines 30-40)
at least one national network (i.e. wireless network) (col. 7 lines 30-40) and
a central network (i.e. enterprise network) (col. 7 lines 30-40)

said telecommunications and telephony network (AT) being provided for delivering signals and data between a plurality of local access (AL, ALI) (each CO logically connected to all other COs within the same local access or transport are) (col. 5 lines 45-55), including local users (UL) (the MDF is directly connected to the CO, and several types of circuits are connected to the MDF (when a line become active a

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customer is immediately known) (col. 5 lines 10-30), and a plurality of network accesses (AG) (the broadband service lines may be connected to the IP telephony system through one or more splitters, which are used to route incoming telephony frequencies to the CO switch) (col. 5 lines 58-67), through local exchanges (voice calls or video signals may be routed to the ITG for conversion into RTP IP packets) (col. 8 lines 58-67)

each of said local exchanges (CL,CR) including a multi-protocol gateway device (GV) for video and audio signals and data compression and conversion into IP packets bearing IP telephony data flow or data flow from the internet (the trunks are shared network facilities that are used to interconnect COs and a CO may be an internet service provider, voice calls or video signals may be routed to the ITG for conversion into RTP IP packets) (col. 8 lines 58-67, col. 7 lines 44-55, and col. 9 lines 34-51)

wherein said local users (UL) of each local access (AL, ALI) are connected to local centralizing devices (MD) (i.e. DSLAM) (col. 4 lines 53-63) through first linking means (CO) for flowing data and signals (the DSLAM is connected to the splitters which are connected to the MDF, which is directly connected to the CO) (col. 7 lines 64-67, col. 5 lines 12-20 and figure 2) and

said local centralizing devices (MD) are in turn connected to said local exchanges (CL,CR) through second linking means (C1,C4) for flowing data and signals (the DSLAM is connected to the IP router (after passing through the splitter the calls are then digitized by the DSLAM and sent to the IP router) which is connected to the ITG (IP voice packets may be sent by the IP router to the ITG)) (col. 9 lines 34-50 and 8-16),

while said local exchanges (CL,CR) are connected to said networks accesses (AG) through third linking means (C2,C41) for flowing data and signals (the DSLAM is connected to the IP router (after passing through the splitter the calls are then digitized by the DSLAM and sent to the IP router) which is connected to the ITG (IP voice packets may be sent by the IP router to the ITG)) (øo1.9 lines :34-50 and 8-16),

Schuster fails to disclose characterized in that at least said second (C1 ,C4) and said third linking means (C2,C41) are constituted by directional satellite radio bridges (RLD,ST),

In a similar field of endeavor, Wiedeman discloses characterized in that at least said second (C1,C4) and said third linking means (C2,C41) are constituted by directional satellite radio bridges (RLD,ST) (a gateway which interconnects the UT to the PSTN via one or more of the satellites through bidirectional satellite RF links) (col. 4 lines 30-40),

At the time of invention it would have been obvious to modify the invention of Schuster to include characterized in that at least said second (C1,C4) and said third linking means (C2,C41) are constituted by directional satellite radio bridges (RLD,ST). Motivation for this modification would have been to all the users terminal access to the PSTN.

Regarding claim 2, the combination discloses a telecommunications and telephony network (AT) as claimed in claim 1. Schuster further discloses characterized in that said first linking means (CO) are constituted physical cables such as telephone twisted pairs or optical fibers (the physical media includes media for one or more

IP/data networks such as copper wire pairs for DSL and media for POTS such as copper wire) (col. 4 lines 22-30).

Regarding claim 3, the combination discloses a telecommunications and telephony network (AT) as claimed in claim 1. Wiedeman further discloses characterized in that said local routing devices (R) are connected to satellite routing devices (RS) or to radio bridges (PR) (a gateway which interconnects the UT to the PSTN via one or more satellites (satellites may be may be bent pipe repeaters) through bidirectional links) (col. 4 lines 25-45), said radio bridges (PR) being able to provide connections between local residents' networks (RLC) a gateway which interconnects the UT to the PSTN via one or more satellites (satellites may be may be bent pipe repeaters) through bidirectional links) (col. 4 lines 25-45).

At the time of invention it would have been obvious to modify the invention of the combination to include characterized in that said local routing devices (R) are connected to satellite routing devices (RS) or to radio bridges (PR), said radio bridges (PR) being able to provide connections between local residents' networks (RLC). Motivation for this modification would have been to all the users terminal access to the PSTN.

3. Claim 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al. (Schuster), U.S. Patent 6,954,454, in view of Wiedeman et al (Wiedeman), U.S. Patent 6,233,463, in further view of Bosch et al. (Bosch), U.S. Patent 5,839,053.

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Regarding claim 5, the combination Schuster and Wiedeman discloses telecommunications and telephony network (AT) as claimed in claim 1. Wiedeman further discloses characterized in that each regional network is connected to the relative local residents' network (RLC) by means of a digital bidirectional satellite radio transmission (a gateway which interconnects the UT to the PSTN via one or more satellites (satellites may be bent pipe repeaters) through bidirectional links) (col. 4 lines 25-45) or by means of communication via optical fibres.

Regarding claim 6, Schuster discloses a telecommunications and telephony network (AT) for controlling mobile (TC) or fixed peripheral devices at a customer premises, of the type comprising

- at least of local area network (i.e. IP voice network) (col. 7 lines 30-40);
- at least one local residents' network (i.e. cable network) (col. 7 lines 30-40)
- at least one national network (i.e. wireless network) (col. 7 lines 30-40) and
- a central network (i.e. enterprise network) (col. 7 lines 30-40)

said telecommunications and telephony network (AT) being provided for delivering signals and data between a plurality of local access (AL, ALI) (each CO logically connected to all other COs within the same local access or transport are) (col. 5 lines 45-55), including local users (UL) (the MDF is directly connected to the CO, and several types of circuits are connected to the MDF (when a line become active a customer is immediately known) (col. 5 lines 10-30), and a plurality of network accesses (AG) (the broadband service lines may be connected to the IP telephony system

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through one or more splitters, which are used to route incoming telephony frequencies to the CO switch) (col. 5 lines 58-67), through local exchanges (voice calls or video signals may be routed to the ITG for conversion into RTP IP packets) (col. 8 lines 58-67)

each of said local exchanges (CL,CR) including a multi-protocol gateway device (GV) for video and audio signals and data compression and conversion into IP packets bearing IP telephony data flow or data flow from the internet (the trunks are shared network facilities that are used to interconnect COs and a CO may be an internet service provider, voice calls or video signals may be routed to the ITG for conversion into RTP IP packets) (col. 8 lines 58-67, col. 7 lines 44-55, and col. 9 lines 34-51)

wherein said local users (UL) of each local access (AL, ALI) are connected to local centralizing devices (MD) (i.e. DSLAM) (col. 4 lines 53-63) through first linking means (C1) for flowing data and signals (the DSLAM is connected to the splitters which are connected to the MDF, which is directly connected to the CO) (col. 7 lines 64-67, col. 5 lines 12-20 and figure 2) and

said local centralizing devices (MD) are in turn connected to said local exchanges (CL,CR) through second linking means (C2,C4) for flowing data and signals (the DSLAM is connected to the IP router (after passing through the splitter the calls are then digitized by the DSLAM and sent to the IP router) which is connected to the ITG (IP voice packets may be sent by the IP router to the ITG)) (col. 9 lines 34-50 and 8-16), while said local exchanges (CL,CR) are connected to said network accesses (AG) through third linking means (C3,C41) for flowing data and signals (the DSLAM is

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connected to the IP router (after passing through the splitter the calls are then digitized by the DSLAM and sent to the IP router) which is connected to the ITG (IP voice packets may be sent by the IP router to the ITG)) (col. 1.9 lines :34-50 and 8-16),

Schuster fails to disclose characterized in that at least said second (C1 ,C4) and said third linking means (C2,C41) are constituted by directional satellite radio bridges (RLD,ST),

In a similar field of endeavor, Wiedeman discloses characterized in that at least said second (C1,C4) and said third linking means (C2,C41) are constituted by directional satellite radio bridges (RLD,ST) (a gateway which interconnects the UT to the PSTN via one or more of the satellites through bidirectional satellite RF links) (col. 4 lines 30-40),

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At the time of invention it would have been obvious to modify the invention of Schuster to include characterized in that at least said second (C1,C4) and said third linking means (C2,C41) are constituted by directional satellite radio bridges (RLD,ST). Motivation for this modification would have been to all the users terminal access to the PSTN.

The combination Schuster and Wiedeman discloses telecommunications and telephony network (AT) as claimed in claim 1. Wiedeman further discloses characterized in that each national network is connected to the relative region network by means of satellite network (a gateway which interconnects the UT to the PSTN via one or more satellites (satellites may be may be bent pipe repeaters) through bidirectional links) (col. 4 lines 25-45).

Wiedeman fails to disclose using a geostationary satellite.

In a similar field of endeavor, Bosch discloses using a geostationary satellite (GEO) for communication purposes (the station ST is connected via GEO communication satellites) (col. 6 lines 46-56).

At the time of invention it would have been obvious to modify the invention of the combination Schuster and Wiedeman to include using a geostationary satellite (GEO) for communication purposes. Motivation for this modification would have been to form a spatial diversity communication system.

At the time of invention it would have been obvious to modify the invention of the combination Schuster and Wiedeman to include discloses characterized in that each regional network is connected to the relative local residents' network (RLC) by means of

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a digital bidirectional satellite radio transmission or by means of communication via optical fibres. Motivation for this modification would have been to all the users terminal access to the PSTN.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al. (U.S. Pat. No. 6,954,454) in view of Wiedman et al. (U.S. Pat. No. 6,233,463) in further view of Kelly et al. (U.S. Pub. No. 2002/0057097)

Regarding claim 1, Schuster discloses a telecommunications and telephony network (AT) for controlling mobile (TC) or fixed peripheral devices at a customer premises, of the type comprising

at least of local area network (i.e. IP voice network) (col. 7 lines 30-40);

at least one local residents' network (i.e. cable network) (col. 7 lines 30-40)

at least one national network (i.e. wireless network) (col. 7 lines 30-40) and

a central network (i.e. enterprise network) (col. 7 lines 30-40)

said telecommunications and telephony network (AT) being provided for delivering signals and data between a plurality of local access (AL, ALI) (each CO logically connected to all other COs within the same local access or transport are) (col. 5 lines 45-55), including local users (UL) (the MDF is directly connected to the CO, and several types of circuits are connected to the MDF (when a line become active a customer is immediately known) (col. 5 lines 10-30), and a plurality of network accesses (AG) (the broadband service lines may be connected to the IP telephony system through one or more splitters, which are sued to route incoming telephony frequencies

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to the CO switch) (col. 5 lines 58-67), through local exchanges (voice calls or video signals may be routed to the ITG for conversion into RTP IP packets) (col. 8 lines 58-67)

each of said local exchanges (CL,CR) including a multi-protocol gateway device (GV) for video and audio signals and data compression and conversion into IP packets bearing IP telephony data flow or data flow from the internet (the trunks are shared network facilities that are used to interconnect COs and a CO may be an internet service provider, voice calls or video signals may be routed to the ITG for conversion into RTP IP packets) (col. 8 lines 58-67, col. 7 lines 44-55, and col. 9 lines 34-51)

wherein said local users (UL) of each local access (AL, ALI) are connected to local centralizing devices (MD) (i.e. DSLAM) (col. 4 lines (53-63) through first linking means (CO) for flowing data and signals (the DSLAM is connected to the splitters which are connected to the MDF, which is directly connected to the CO) (col. 7 lines 64-67, col. 5 lines 12-20 and figure 2) and

said local centralizing devices (MD) are in turn connected to said local exchanges (CL,CR) through second linking means (C1,C4) for flowing data and signals (the DSLAM is connected to the IP router (after passing through the splitter the calls are then digitized by the DSLAM and sent to the IP router) which is connected to the ITG (IP voice packets may be sent by the IP router to the ITG)) (col. 9 lines 34-50 and 8-16),

while said local exchanges (CL,CR) are connected to said network accesses (AG) through third linking means (C2,C4) for flowing data and signals (the DSLAM is connected to the IP router (after passing through the splitter the calls are then digitized

by the DSLAM and sent to the IP router) which is connected to the ITG (IP voice packets may be sent by the IP router to the ITG)) (col. 1.9 lines :34-50 and 8-16),

Schuster fails to disclose characterized in that at least said second (C1 ,C4) and said third linking means (C2,C41) are constituted by directional satellite radio bridges (RLD,ST),

In a similar field of endeavor, Wiedeman discloses characterized in that at least said second (C1,C4) and said third linking means (C2,C41) are constituted by directional satellite radio bridges (RLD,ST) (a gateway which interconnects the UT to the PSTN via one or more of the satellites through bidirectional satellite RF links) (col. 4 lines 30-40),

At the time of invention it would have been obvious to modify the invention of Schuster to include characterized in that at least said second (C1,C4) and said third linking means (C2,C41) are constituted by directional satellite radio bridges (RLD,ST). Motivation for this modification would have been to all the users terminal access to the PSTN.

The combination does not disclose the bridges being powered by means of a solar power system.

Kelly discloses a data connection made using terrestrial and satellite communications. This configuration can be powered by a rechargeable battery, which is charged by a solar collector. (Para 53)

It would have been obvious to one of ordinary skill in the art to modify the combination to include the teachings of Kelly in order to provide a self sustaining

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connection for the system which would become more reliable without having to make sure a constant power connection is readily available.

Response to Arguments

4. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues the two references of Schuster et al. and Wiedeman et al. are not combinable as they do not include similar art. The examiner disagrees.

Applicant argues Wiedeman is not concerned with a telecommunications network that controls mobile or fixed peripheral devices. Applicant's own arguments include Wiedman as controlling a user terminal, i.e., a satellite phone, which one of ordinary skill in the art would recognize as a mobile device. Arguments even include the classification of Wiedeman as "**telecommunication** receiver" art. It would also have been obvious to one of ordinary skill in the art that a telecommunication receiver could be applicable to a telecommunication system.

The examiner also notes, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Elcenko whose telephone number is (571) 272-8066. The examiner can normally be reached on M-F 7:30 AM through 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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